Work Orde March-28-13 12		129		*991	129*						Page 1
tem ID: Revision ID: tem Name:	D3916-041 Rib Assembly			Accept	*N900	<b>040</b>	100	<b>)*</b> s	etup Si	IV	S1* S2*
Start Date: Required Date: Reference:	3/27/13	Start Qty: 8.00 Req'd Qty: 8.00	*8* *8*		Cust Item I Customer:	D:	,			IV	.7/
Approvals:		n: MC5	Date: /3-04-06			ate:		R		ton	R1* R2*
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Rev	ision Nbr									
D3916	, A	:								•	•,
*100				0.00							
Large Fab Large Fab	·	*** Make li side of tube 3- Trim acco	e with manuel pipe bende	other lines, and ensure se size as per dwg D3916	eam in place on	3/170 1.	3-O+	-29 (T		01.30	PD
*105		QC6- Inspect dimension	s to drawing	0.00				To	_\$	1 13 0	4.30
QC		Memo		0.00			_		-		

Quality Control

										DQA:	Date:			
NCR: Y	es / No			1	<b>WORK ORDER NON-</b>	CON	FORM			•				
					•					QA Closed:	Date:			
Work Orde	er:			!	DISPOSITION		AGAINST DEPARTMENT/PROCESS							
					Rework	7 I		Skid-tube	Crosstube		Water Jet	Engineering		
Part N	lo				Scrap	] [	ſ	Machining	Small Fab		d. Eng. Coor.	Quality		
					Use-as-is	<b>」</b> Ⅰ		noforming	Finishing	Rec/Sto	re/Packaging	Other		
NCR N	lo			<del></del>	Work Order Update	╛┃		Large Fab	Composite	J	Supplier			
Root				Descri	ption of work order update	ln	itial	Ac	ction	Sign &				
Cause	Date	Step	Qty		or Non-conformance	Chie	ef Eng	Desc	cription	Date	Verification	QC Inspector		
Doc/Data														
quip/Tooling		1		1 1 1										
Operator														
Material		Ì												
Setup		i	1								1			
Other														
Process				!										
Supplier														
Fraining		ļ	1	j										
Jnapproved										<u> </u>				
					<b></b>	FAULT	CATE	GORY						
Landi	ng Gear			_	General				_	7		1		
*	Bending				Bend	$\mathbf{H}$	Grain			Ovalized		Pressure/Forced		
	Centre N	ot Conce	ntric to C	D/\$	BOM/Route	-	Hardwa			Over/Under	<del>-</del>	Temperature/Cure		
	Cracks				Broken/Damaged	_		on Incomplete		Part Incorre	<del>-</del>	Weld		
	Crushed/	'Crimped			Burrs			ions Incomplete	/Unclear	Part Lost/M	issing	Wrong Stock Pulled		
	Cuffs	•			Contamination	-	Mainte		L	Part Moved				
	Heat Tre	at			Countersink	<del></del>	Mislabe		L	Positioned V	_	1		
	Inspection	n Strip in	Tube		Cut Too Short		Misreac	İ	L	Power Loss/	Surge	Other		
	Ripples in	n Bend		L	Drill Holes	Ц̈́	Offset					· · · · · · · · · · · · · · · · · · ·		
	Torque V	Vaves in I	Extrusion	۱ <u> </u>	Drawing		Out of C	Calibration						
	Turning 9	Seauence	•		Finish	1 1	Out of S	Sequence						

Outside Dimensions

Wave/Twist in Tube

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Work Orde March-28-13 12		129		*991	29*				Page 2
Item ID: Revision ID: Item Name:	D3916-041 Rib Assembly			Accept	*N900	<b>04010</b>	) <b>೧*</b> s	etup Start Stop	*NS1* *NS2*
Start Date: 3/27/13 Required Date: 3/27/13 Reference:		Start Qty: 8.00 Req'd Qty: 8.00	*8* *8*		Cust Item I Customer:	D:			14( )/
Approvals:	Process Pla	n:	_	Tooling: SPC (Y/N):		ate:	 	Run Start Stop	*NR1* *NR2*
Sequence ID/ Work Center II 107 *107* Large Fab Large Fab	)	Memo	rod Batch: M23823 hing as per dwg D3916 ds flush	Set Up/ Run Hours 0.00	Tool ID	Tool # Plan Cod	e Qty	•	Reject Insp. Number Stamp
*110 *110* QC Quality Control		QC5- Inspect part compl	leteness to step on W/O	0.00 (SC) 0.00	3.4.30		4		
120 *120* QC		QC10- Inspect visual per	r QS1004- ground welds	0.00	3-4-30		4	· <del>/ / /</del>	

Quality Control

NCR: Y	'es /	No			1 1 !	WORK ORDER NON-C	O.	NFORI	AANCE / UPE		QA Closed:	Date:			
Work Orde	ar.				;	DISPOSITION				AGAINST DEI	PARTMENT	ARTMENT/PROCESS			
Part N	lo					Rework Scrap Use-as-is Work Order Update	Skid-tube Crosstube Machining Small Fab Thermoforming Finishing Composite				Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other			
Root					Descr	ption of work order update	1	nitial	Act		Sign &				
Cause		ate	Step	Qty	!	or Non-conformance	Ch	ief Eng	Descr	iption	Date	Verification	QC Inspector		
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved		-	۶,						•						
					1	F	AUL	T CATE	GORY						
Landii	Bending Centre Not Concentric to O/S Cracks Crushed/Crimped. Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend Torque Waves in Extrusion					General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing		Instruct Mainte Mislabe Misread Offset Out of (	ion Incomplete cions Incomplete/U enance eled d Calibration		Ovalized Over/Under Part Incorre Part Lost/Mi Part Moved Positioned V	ct issing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other		
	Turning Sequence					Finish	Jour or :	Sequence							

Outside Dimensions

DQA: \_\_

Date:

Wave/Twist in Tube

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Work Order ID 99129 Page 3 March-28-13 12:47:08 PM Accept Item ID: D3916-041 \*N900040100\* Setup Start **Revision ID:** Stop Item Name: Rib Assembly Start Qty: 8.00 **Start Date:** 3/27/13 **Cust Item ID:** Required Date: 3/27/13 Req'd Qty: 8.00 **Customer:** Reference: Run Start Date: Tooling: Approvals: Process Plan: Date: Stop Date: \_\_\_\_\_ SPC (Y/N): QC:\_ Date: Tool ID Tool # Plan Sequence ID/ Set Up/ Reject Reject Operation Accept Insp. Description Qty Qty Number Stamp Work Center ID Code **Run Hours** Identify as per dwg & Stock Location: WA 130 0.00 (pl 13.4.30 \*130\* 0.00 Packaging Memo Packaging

140

QC21- Final Inspection - Work Order Release

0.00

\*1**4**0\*

QC Quality Control

Memo

0.00

3-9-01

NCR: Y	es	/ No			İ	WORK ORDER NON-C	100	NFORN	/IANCE / UPI	DATE	QA Clos	ed:	Date	·		
Work Orde	r:			. 1		DISPOSITION		AGAINST DEPARTMENT/PROCESS								
Part No.  NCR No.						Rework Scrap Use-as-is Work Order Update	l Therm	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier			Engineering Quality Other					
Root Cause		Date	Step	Qty	1 :	ption of work order update or Non-conformance	1	nitial nief Eng		tion ription	Sign 8	- 1	Verification	QC Inspector		
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved													· .			
onappiotes			<u> </u>	<del></del>	<del>                                     </del>	F	AUL	T CATE	GORY							
Landin		iear Bending				General Bend		Grain		Γ	Ovalize	d	Γ	Pressure/Forced		
-		Centre No			o/s	BOM/Route Broken/Damaged Burrs		Hardware Inspection Incomplete Instructions Incomplete/Unclear			Over/Under tolerance Temper Part Incorrect Weld			Temperature/Cure Weld Wrong Stock Pulled		
	Crushed/Crimped  Cuffs  Heat Treat  Inspection Strip in Tube					Contamination Countersink Cut Too Short		Mainte Mislabe Misread	enance eled		Part Mo Position Power I	oved ned Wro	Other			
	-	Ripples in Torque W		Extrusio	n	Drill Holes Drawing	L	Offset Out of 0	Calibration							

Out of Sequence

Outside Dimensions

DQA: \_\_\_\_\_ Date: \_\_\_

Turning Sequence

Wave/Twist in Tube

Finish

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Page 1

Work Order ID:

99129

Parent Item:

D3916-041

Parent Item Name:

Rib Assembly

**Start Date:** 3/27/13

Required Date: 3/27/13

Start Qty: 8.00

Required Qty: 8.00

Comments:

IPP RevA: New issue DD verified by:EC verified by:EC

IPP Rev:B as per dwg revA 10.03.15

	verified by:EC												
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3759-1 Bushing		Manufactured	No			100	Each	146.0000	7	56	B)_13:	CE.PO	PL
				<b>Location</b>		Loc Qty	<u>L</u>	oc Code					
				WA004		146							
				664		1							
				792		1							
				834		7							
				865 882		20 44							
				897		11							
						22							
	•			980 980	89	40			2	27	,		
<b>M304TS0.750W.049</b> 304 SQ Tube .75x.75x.049	9W	Purchased	No			100	f	639.0609	4.166	35.08210 S/L/)	05 <u>ئىر3</u> ر	4-29	
				<b>Location</b>		Loc Qty	<u>L</u>	oc Code					
		٨,		MAT017		459.1583							
		•	<u>:</u> , -	124	492	459.1583			<u>l7.</u>	5411			
				WA006		179.9026264							
					219	49.7359405							
				123	484	130.166686				<del></del>			

NCR: Y	'es	/ No	-		i i	WORK ORDER NON-	COI	NFORM	MANCE / UPI	DATE		_	•		
											QA Closed:	Date	<u> </u>		
Work Orde	er: _		· ·		!	<b>DISPOSITION</b> Rework	٦	AGAINST DEPARTMENT/PROCESS  Skid-tube Crosstube Water Jet Engin							
Part No.						Scrap Use-as-is		<b>!</b> 1	Machining noforming	Small Fab Finishing Composite	4	d. Eng. Coor.	Quality Other		
NCR N	۱o					Work Order Update	ا ل		Large Fab	Composite	Supplier				
Root					Descr	iption of work order update	T	Initial	Act	tion	Sign &				
Cause		Date	Step	. Qty	1	or Non-conformance	Ch	nief Eng	Desci	ription	Date	Verification	QC Inspector		
Doc/Data					:										
Equip/Tooling					i I										
Operator					1										
Material					i i										
Setup															
Other			l ·		<b>l</b> 'i								j		
Process															
Supplier	Ш				<b> </b>										
Training															
Unapproved	٠	s.*	-							· · ·					
							AUI	LT CATE	GORY						
Landi	ng G	iear			<u> </u>	General	_	7			1	r	<b>-</b> .		
	Ш	Bending				Bend		Grain			Ovalized	<u> </u>	Pressure/Forced		
		Centre No	ot Conce	ntric to	o/s	BOM/Route	$\perp$	Hardwa			Over/Under	· }	Temperature/Cure		
		Cracks			\	Broken/Damaged	L	<b>-</b> 1 '	ion Incomplete		Part Incorred	<u> </u>	Weld		
	Ш	Crushed/	Crimped		i L	Burrs	L	Instruct	ions Incomplete/	Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled		
		Cuffs				Contamination	<u> </u>	Mainte			Part Moved		•		
	Ш	Heat Trea	at		<b> </b>	Countersink	$\perp$	Mislabe	eled		Positioned V	_	٦		
		Inspectio	n Strip ir	1 Tube		Cut Too Short		Misread	d		Power Loss/	Surge	Other		
		Ripples in	Bend			Drill Holes Offset									
		Torque W	Vaves in	Extrusio	n [	Drawing Out of Calibration									

Out of Sequence

Outside Dimensions

DQA:

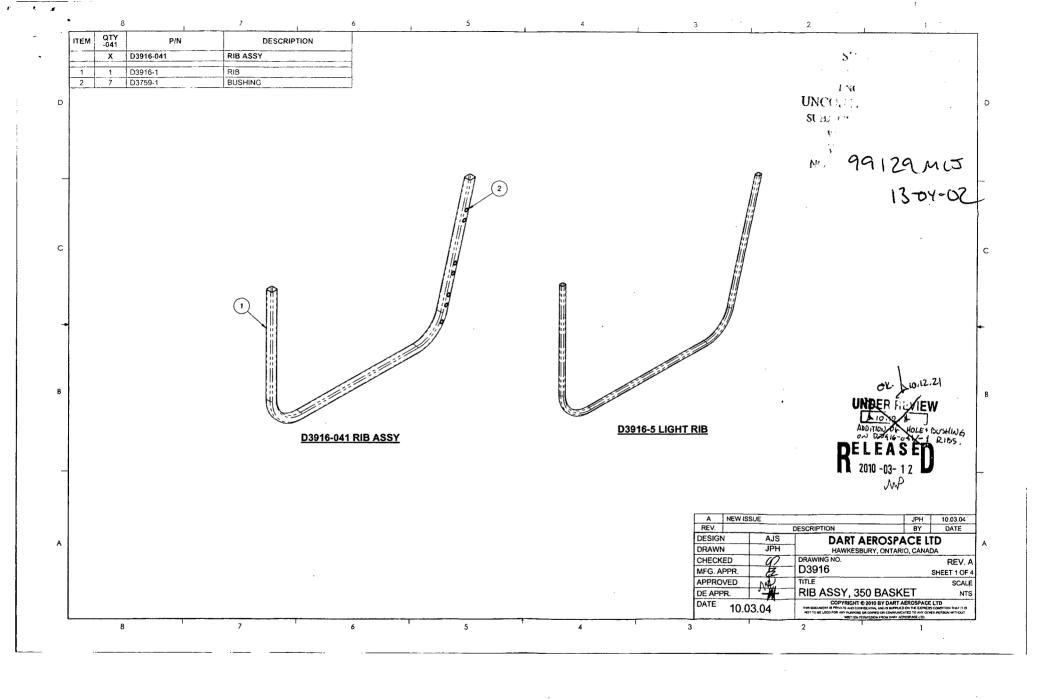
Date:

Turning Sequence

Wave/Twist in Tube

Finish

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8 ٠D -D3916-1 RIB Ç D3759-1 – BUSHING 7 PL **D3916-041 RIB ASSY** NOTES:
1) MATERIAL: N/A
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: N/A
6) IDENTIFICATION: NONE
7) WEIGHT -041: 1.84 lbs
8) WELD PER DART QSI 004 DESIGN DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA AJS DRAWN JPH DRAWING NO. CHECKED REV. A MFG. APPR. SHEET 2 OF 4 APPROVED TITLE SCALE RIB ASSY, 350 BASKET NTS

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